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# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

BRIAN C. STEED  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

September 11, 2019

John Byars, General Manager  
Canyon Fuel Company, LLC  
597 South SR24  
Salina, Utah 84654

Subject: Conditional Approval to Add Longwall Mining (Pines East Panels), Canyon Fuel Company, LLC, Sufco Mine, C/041/0002, Task #5981

Dear Mr. Byars:

The above-referenced amendment is approved conditioned upon receipt of 2 clean copies prepared for incorporation. Please submit these copies by October 11, 2019. Once we receive these copies, final approval will be granted.

A stamped incorporated copy of the approved plans will also be returned to you at that time, for insertion into your copy of the Mining and Reclamation Plan.

If you have any questions, please call me at (801) 538-5350.

Sincerely,

Steve Christensen  
Coal Program Manager

SKC/sqs

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## Technical Analysis and Findings

### Utah Coal Regulatory Program

**PID:** C0410002  
**TaskID:** 5981  
**Mine Name:** SUFCO MINE  
**Title:** ADD LONGWALL MINING (PINES EAST PANELS)

### Environmental Resource Information

#### Historic and Archeological Resource Information

##### Analysis:

The amendment meets the State of Utah R645-301-411 requirements for Historic and Archeological Resource Information.

A July 2019 report by Tetra Tech titled "A Cultural Resource Inventory for Canyon Fuel Company, LLC's SUFCO Mine Pine Tract Subsidence Project, Sevier County, Utah" is included in the Confidential section of the amendment. The results of the survey did not find any NRHP-eligible sites in the Pines Tract area. A letter dated July 17, 2019 from the Manti-La Sal National Forest to SHPO is also included in the amendment. The Forest Service recommends a finding of no historic properties affected. In a response letter dated July 24, 2019, SHPO concurs with the finding of no historic properties affected.

tmiller

### Operation Plan

#### Subsidence Control Plan Subsidence

##### Analysis:

The amendment meets the State of Utah R645 requirements for Subsidence Control Plans.

The amendment satisfies the requirements of R645-301-525.100 thru -525.130, -525.400 because the Permittee has included Plates, Tables, and a narrative describing the location and extent of anticipated subsidence for the proposed mining areas as well as associated monitoring activities. The Permittee proposes to employ Longwall mining methods in the Pines East section of Lease UTU-76195. DOGM granted approval for first mining on May 1, 2019 (Task #5918, First Mining of Pines East Panels). The first mining that was approved in May was planned as development mining in advance of the Longwall mining proposed in this amendment. The lease for this portion of the Pines Tract was acquired in October 1999. The narrative on Page 5-25 states that only the Upper Hiawatha coal seam will be mined, and the expected overburden will range between 750 - 1,000 feet.

Plates 5-10 and 5-10c illustrate the orientation of the Longwall panels as well as the limit of potential subsidence within the 15-degree draw angle. There are no structures, dwellings, impoundments, roads, or utility corridors on the surface above the proposed Longwall panels, and the expected subsidence across the panels is 5 feet or less. Also included in this amendment is Table 5-2, which highlights a list of subsidence control points that have been established above and adjacent to the proposed longwall panels. Once mining has commenced, these points will be surveyed every August using photogrammetric methods and the results compared to baseline data established in 1999. The results of this

survey comparison are compiled and sent to UDOGM to satisfy subsidence monitoring commitments in the annual report.

jeatchel

## **Fish and Wildlife Bald and Golden Eagles**

### *Analysis:*

The amendment meets the State of Utah R645-301-358 requirements for Fish and Wildlife Bald and Golden Eagle Protection.

Maps showing the location of raptor nests can be found in the confidential portion of the MRP. These maps show few nests in the area of the Pines East panels, none of which are within the area of potential subsidence. The closest nests are 322 and 810, golden eagle nests that have not been observed in over 10 years. Following consultation with the Manti-La Sal National Forest, it was determined that the closest nest of concern is nest 811, a golden eagle nest located roughly 1/3-mile outside the area of potential subsidence. Forest Service personnel monitor this nest annually and will continue to do so in the future. A Tetra Tech report titled "2019 SUFCO Mine Annual Raptor Survey Results" dated July 29, 2019 is included in the amendment. That survey covered various pieces of the permit area including a large portion of the Pines tract in which no active nests were observed. Follow-up consultation with the Forest Service in August of 2019 indicated that the nearby nests were not used in 2018 and no other concerns were brought forward relating to the project. No impact from the proposed Pines East Panel amendment is anticipated, but should concerns arise from the monitoring of this and other nests, modifications to the mine plan may be made in accordance with R645-301-358.200.

tmiller

## **Vegetation**

### *Analysis:*

The amendment meets the State of Utah R645-301-331 requirements for Vegetation.

Chapter 3 Section 3.2.2.2 details site specific resource information including information for the Pines East Panels. Because there are no new surface disturbances associated with this amendment, the only concern is with subsidence cracking. Section 3.2.2.2 states that should a seed mix be required to use on backfilled subsidence cracks in the Pines East Panels area, the same seed mix designated for the 3R4E panel would be used. This seed mix can be found in Section 3.4.1.2.

tmiller

## **Maps Affected Area**

### *Analysis:*

The amendment meets the State of Utah R645 requirements for Affected Area Maps.

The application satisfies the requirements for R645-301-521.141 thru -521.142 because Plates 5-10 and 5-10c clearly illustrate the location and configuration of the proposed Longwall mining panels, as well as the subsidence control points that have been designated to monitor surface displacement once subsidence mining begins. Also depicted is the limit of potential subsidence encircling the proposed mining panels which defines the expected subsidence within a 15-degree angle of draw. The Plates have been stamped by Jacob D. Smith, a licensed Professional Engineer in the State of Utah.

jeatchel

## **Maps Mine Workings**

### *Analysis:*

The amendment meets the State of Utah R645 requirements for Mine Workings Maps.

The application satisfies the requirements for R645-301-521.142 and -512.110 because Plates 5-10 and 5-10c clearly illustrate the location and configuration of the proposed Longwall mining panels. The Plates also illustrate the location of older mine workings in relation to the proposed Longwall panels as well as the topographic surfaces and other pertinent facilities. The Plates have been stamped by Jacob D. Smith, a licensed Professional Engineer in the State of Utah.

